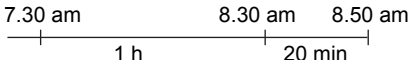


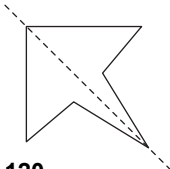
SOLUTIONS

TRIAL TEST 7 (SA2)

Paper 1

- (1)
 $34\ 035\text{ g} \div 1000 = 34.035\text{ kg}$
- (3)
- (3)
 $\frac{6}{11} \times 1210 = 660$
- (1)
1 h \rightarrow 60 min
2 h \rightarrow 120 min
 $\frac{3}{4} \times 60 = 45\text{ min}$
 $120 + 45 = 165\text{ min}$
- (2)
 $120 - 45 + 3 \times 4 \div 3$
 $= 120 - 45 + 12 \div 3$
 $= 120 - 45 + 4$
 $= 79$
- (3)
 $3.2 \times \$4 = \12.80
- (3)
 $83 - \frac{12 \times 4}{16} = 83 - \frac{48}{16}$
 $= 83 - 3$
 $= 80$
- (2)
 $180^\circ - 108^\circ = 72^\circ$
 $72^\circ \div 2 = 36^\circ$
- (3)
- (3)
3 bowls \rightarrow 45 g
1 bowl \rightarrow 15 g
72 bowls \rightarrow $15 \times 72 = 1080\text{ g}$
- (3)
 $600 + 1500 + 1200 + 600 = 3900$
 $270^\circ \rightarrow 3900$
 $90^\circ \rightarrow 3900 \div 3 = 1300$
- (1)
 $1200 : 1300$
 $12 : 13$
- (3)
 $3900 + 1300 = 5200$
- (4)
Gary \rightarrow distance = $80\text{ km/h} \times 6\text{ h}$
 $= 480\text{ km}$
Albert \rightarrow average speed = $\frac{3}{4} \times 80$
 $= 60\text{ km/h}$
Albert \rightarrow time taken = $480\text{ km} \div 60\text{ km/h}$
 $= 8\text{ h}$

- (3)
Time taken = $100\text{ km} \div 75\text{ km/h}$
 $= 1\frac{1}{3}\text{ h}$
 $= 1\text{ h } 20\text{ min}$


- 11
 $16 - 5 = 11\text{ books}$
- 5 : 53
 $10 + 16 + 5 + 10 + 12 = 53\text{ books}$
5 : 53
- 159
 $53 \times 3 = 159\text{ books}$
- 
- 120
 $60^\circ + 60^\circ = 120^\circ$
- $4x + 9$
Now $\rightarrow 4x + 4$
5 years' time $\rightarrow 4x + 4 + 5 = (4x + 9)\text{ years old}$
- $360^\circ - 275^\circ = 85^\circ$
(sum of angles)
 $180^\circ - 85^\circ = 95^\circ$
(angles between two parallel line)
 $180^\circ - 95^\circ = 85^\circ$
(angles on a straight line)
- 135
 $\$98 + \$104 = \$202$
 $\$202 - \$67 = \$135$
- 200
 $\frac{3}{7} \times 490 = 210$ (all boys)
 $210 - 10 = 200\text{ boys}$
- 390
X to Y \rightarrow distance = $80\text{ km/h} \times 3\text{ h}$
 $= 240\text{ km}$
Y to Z \rightarrow distance = $75\text{ km/h} \times 2\text{ h}$
 $= 150\text{ km}$
 $240 + 150 = 390\text{ km}$
- 19.95
3 weeks = $3 \times 7\text{ days} = 21\text{ days}$
 $\$0.95 \times 21 = \19.95
- 14
Volume of water in the container when it is $\frac{7}{9}$ full
 $= \frac{7}{9} \times 1008$
 $= 784\text{ cm}^3$
Height of water = $784 \div 56$
 $= 14\text{ cm}$

28. 68

$$3 + 9 = 12 \text{ units}$$

$$12 \text{ units} = 48 \text{ cm}$$

$$1 \text{ unit} = 48 \text{ cm} \div 12 = 4 \text{ cm}$$

$$3 + 5 + 9 = 17 \text{ units}$$

$$17 \text{ units} = 4 \times 17 = 68 \text{ cm}$$

29. 252

$$8 \text{ am to } 11.30 \text{ am} = 3\frac{1}{2} \text{ h}$$

$$\text{Distance} = 72 \text{ km} \times 3\frac{1}{2} \text{ h}$$

$$= 72 \text{ km/h} \times \frac{7}{2} \text{ h}$$

$$= 252 \text{ km}$$

30. 25

$$12.5 \text{ l} = 12\,500 \text{ cm}^3$$

$$12\,500 \text{ cm}^3 \div 500 \text{ cm}^2 = 25 \text{ cm}$$

Paper 2

1. prism

2. 7200

shop A

100%

shop B

100%	20%
------	-----

$$100\% + 100\% + 20\% = 220\%$$

$$220\% \rightarrow \$15840$$

$$1\% \rightarrow \$72$$

$$100\% \rightarrow \$7200$$

3. 138

$$47.5 \times 6 = 285$$

$$0 + 1 + 2 + 3 + 4 + 5 = 15$$

$$285 - 15 = 270$$

$$270 \div 6 = 45$$

The first 3 numbers are 45, 46 and 47.

$$45 + 46 + 47 = 138$$

4. 60

1st part : 2nd part

$$3 : 1$$

1 unit = 120 km

3 units = 360 km

Average speed = $360 \text{ km} \div 6 \text{ h}$

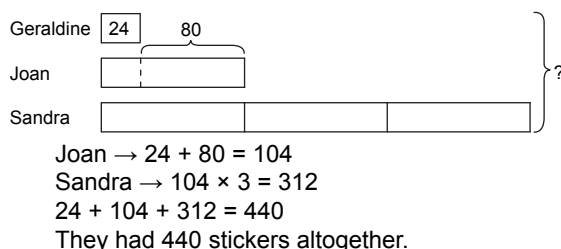
$$= 60 \text{ km/h}$$

5. 2887.5

$$\frac{3}{4} \times \frac{22}{7} \times \frac{11}{7} \times \frac{5}{35} \times 35 = \frac{5775}{2}$$

$$= 2887.5 \text{ cm}^2$$

6. 440 stickers



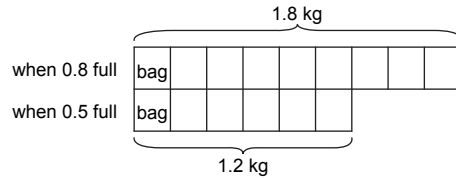
7. 2160 cm³

$$\frac{40}{100} \times 30 = 12 \text{ cm (height of water)}$$

$$18 \times 10 \times 12 = 2160 \text{ cm}^3$$

The volume of water is 2160 cm³.

8. 200 g



$$8 - 5 = 3 \text{ units}$$

$$3 \text{ units} = 1.8 - 1.2 = 0.6 \text{ kg}$$

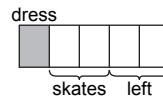
$$1 \text{ unit} = 0.6 \div 3 = 0.2 \text{ kg}$$

$$8 \text{ units} = 0.2 \times 8 = 1.6 \text{ kg}$$

bag $\rightarrow 1.8 - 1.6 = 0.2 \text{ kg}$

The mass of the bag was 200 g.

9. (a) $\frac{2}{5}$



$$1 - \frac{1}{5} = \frac{4}{5}$$

$$\frac{1}{2} \times \frac{4}{5} = \frac{2}{5}$$

Gina had $\frac{2}{5}$ of her money left.

(b) \$375

$$2 \text{ units} = \$150$$

$$1 \text{ unit} = \$150 \div 2 = \$75$$

$$5 \text{ units} = \$75 \times 5 = \$375$$

She had \$375 at first.

10. (a) 1 : 1

men : women : children

$$5 : ? : 2$$

$\underbrace{5 : ? : 2}_{7 : 2}$

women $\rightarrow 7 - 5 = 2 \text{ units}$

$$2 : 2 = 1 : 1$$

The ratio is 1 : 1.

(b) 144 people

$$3 \text{ units} = 48$$

$$1 \text{ unit} = 16$$

$$7 + 2 = 9 \text{ units}$$

$$9 \text{ units} = 9 \times 16 = 144$$

There were 144 people.

11. 877.88 cm²

Area of circle = $3.14 \times 16 \times 16$

$$= 803.84 \text{ cm}^2$$

$$\frac{3}{4} \times 803.84 = 602.88 \text{ cm}^2$$

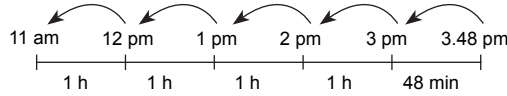
$$\begin{aligned}\text{Area of triangle} &= \frac{1}{2} \times 22 \times 25 \\ &= 275 \text{ cm}^2\end{aligned}$$

$$602.88 + 275 = 877.88 \text{ cm}^2$$

The area of the unshaded part is 877.88 cm².

12. (a) 11 am

$$6 \times 48 \text{ min} = 288 \text{ min} = 4 \text{ h } 48 \text{ min}$$



He started his journey at 11 am.

(b) 75 km/h

$$4 \text{ h } 48 \text{ min} = 4\frac{4}{5} \text{ h} = \frac{24}{5} \text{ h}$$

$$\begin{aligned}\text{Average speed} &= 360 \text{ km} \div \frac{24}{5} \text{ h} \\ &= 75 \text{ km/h}\end{aligned}$$

His average speed was 75 km/h.

13. \$2900

$$75\% \rightarrow \$1905$$

$$1\% \rightarrow \$25.40$$

$$100\% \rightarrow \$2540 \text{ (television)}$$

$$75\% \rightarrow \$270$$

$$1\% \rightarrow \$3.60$$

$$100\% \rightarrow \$360 \text{ (oven)}$$

$$\$2540 + \$360 = \$2900$$

Total price was \$2900.

14. 599.76 cm²

$$\begin{aligned}\text{Area of square} &= 42 \times 42 \\ &= 1764 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of circle} &= 3.14 \times 21 \times 21 \\ &= 1384.74 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}\text{Area of triangle} &= \frac{1}{2} \times 21 \times 21 \\ &= 220.5 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}1764 \text{ cm}^2 - 1384.74 \text{ cm}^2 + 220.5 \text{ cm}^2 \\ = 599.76 \text{ cm}^2\end{aligned}$$

The total shaded area of the shaded parts is 599.76 cm².

15. 456 km

$$\begin{aligned}\text{Jason} &\rightarrow 72 \text{ km/h} \times 3 \text{ h} \\ &= 216 \text{ km}\end{aligned}$$

$$\begin{aligned}\text{Ethan} &\rightarrow 80 \text{ km/h} \times 3 \text{ h} \\ &= 240 \text{ km}\end{aligned}$$

$$216 + 240 = 456 \text{ km}$$

The distance between the two towns was 456 km.

16. 405 km

$$9 \text{ am to } 11.30 \text{ am} \rightarrow 2.5 \text{ h}$$

$$\text{Mr Brown} \rightarrow 72 \text{ km/h} \times 2.5 \text{ h} = 180 \text{ km}$$

$$\text{Mr Smith} \rightarrow 18 + 72 = 90 \text{ km/h}$$

$$90 \text{ km/h} \times 2.5 \text{ h} = 225 \text{ km}$$

$$180 + 225 = 405 \text{ km}$$

The cities were 405 km apart.

17. (a) 428 cm

$$55 + 120 + 78 + 55 + 120 = 428 \text{ cm}$$

The perimeter of the figure is 428 cm.

(b) 8112.5 cm²

$$55 \times 120 = 6600 \text{ cm}^2$$

$$\frac{1}{2} \times 55 \times 55 = 1512.5 \text{ cm}^2$$

$$6600 + 1512.5 = 8112.5 \text{ cm}^2$$

The area of the figure is 8112.5 cm².

18. (a) 1560 cubes

$$48 \text{ cm} \div 4 \text{ cm} = 12$$

$$54 \text{ cm} \div 4 \text{ cm} = 13.5$$

$$40 \text{ cm} \div 4 \text{ cm} = 10$$

Since the width of the block can only be cut to 13 pieces,

$$12 \times 13 \times 10 = 1560$$

He can cut a maximum of 1560 cubes.

(b) 101 430 cm³

$$15 \times 10 \times 5 = 750 \text{ cm}^3$$

$$3 \times 750 = 2250 \text{ cm}^3$$

$$48 \times 54 \times 40 = 103\,680 \text{ cm}^3$$

$$103\,680 - 2250 = 101\,430 \text{ cm}^3$$

The volume of the remaining wooden block is 101 430 cm³.

TRIAL TEST 8 (SA2)

Paper 1

1. (3)

$$4.25 \text{ km} = 4250 \text{ m}$$

$$\frac{510}{4250} \times 100\% = 12\%$$

2. (3)

$$\begin{aligned}\text{Distance} &= 72 \text{ km/h} \times 2 \text{ h} \\ &= 144 \text{ km}\end{aligned}$$

3. (4)

$$\frac{1}{4} \times 40 \text{ kg} = 10 \text{ kg}$$

$$40 \text{ kg} + 10 \text{ kg} = 50 \text{ kg (Alfred)}$$

$$40 \text{ kg} + 50 \text{ kg} = 90 \text{ kg}$$

4. (1)

$$\frac{92}{100} = \frac{23}{25}$$

5. (2)

$$\frac{22}{7} \times 28 = 88 \text{ cm}$$

6. (2)

$$\frac{2}{3} \times 20 \times 8 \times 15 = 1600 \text{ cm}^3$$

7. (4)

8. (1)

$$\begin{array}{ccc} 128 & : & 144 \\ \div 16 & & \div 16 \\ \hline 8 & : & 9 \end{array}$$

9. (3)

$$\frac{1}{2} \times \frac{22}{7} \times 42^6 \times 42^{21} = 2772 \text{ cm}^2$$

10. (3)

$$6 \times 5 \times 2 + 2 = 60 + 2 = 62$$

11. (1)

$$\begin{aligned} 2.5 \text{ days} &\rightarrow 8 / \\ 1 \text{ day} &\rightarrow 8 \div 2.5 = 3.2 / \\ 50 \text{ days} &\rightarrow 50 \times 3.2 = 160 / \end{aligned}$$

12. (4)

$$\begin{aligned} \frac{1}{2} \times 3.14 \times 48 &= 75.36 \text{ cm (2 quadrants)} \\ 6 \times 24 &= 144 \text{ cm} \\ 75.36 + 144 &= 219.36 \text{ cm} \end{aligned}$$

13. (3)

$$\begin{aligned} 19 - 15 &= 4 \text{ units} \\ 4 \text{ units} &= 160 \\ 1 \text{ unit} &= 160 \div 4 = 40 \\ 19 + 15 &= 34 \text{ units} \\ 34 \text{ units} &= 34 \times 40 = 1360 \end{aligned}$$

14. (3)

$$14\,000 + 5.67 = 14\,005.67$$

15. (2)

$$\begin{aligned} \angle DBC &= 180^\circ - 90^\circ - 35^\circ = 55^\circ \\ \angle ABD &= 180^\circ \div 3 = 60^\circ \\ \angle ABC &= 60^\circ + 55^\circ = 115^\circ \end{aligned}$$

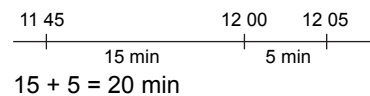
16. 7 034 859

$$7\,000\,000 + 34\,000 + 800 + 59 = 7\,034\,859$$

17. $9x + 2$

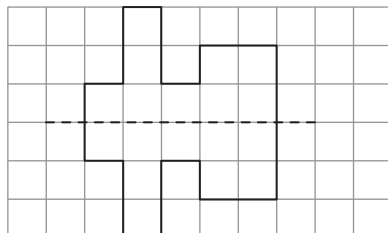
$$12x - 3x + 3 - 1 = 9x + 2$$

18. 20



19. 3

20.



21. 731

$$\begin{aligned} 12 \text{ min} &= 12 \times 60 \text{ s} = 720 \text{ s} \\ 12 \text{ min } 11 \text{ s} &= 720 \text{ s} + 11 \text{ s} \\ &= 731 \text{ s} \end{aligned}$$

22. 525

$$\begin{aligned} 3 \text{ units} &= 225 \\ 1 \text{ unit} &= 225 \div 3 = 75 \\ 7 \text{ units} &= 75 \times 7 = 525 \end{aligned}$$

23. 19

$$\begin{aligned} 100\% - 18\% - 40\% &= 42\% \\ 42\% \div 2 &= 21\% \text{ (Primary 4)} \\ 40\% - 21\% &= 19\% \end{aligned}$$

24. 500

$$\begin{aligned} 21\% &\rightarrow 105 \\ 1\% &\rightarrow 105 \div 21 = 5 \\ 100\% &\rightarrow 5 \times 100 = 500 \end{aligned}$$

25. 85

$$\begin{aligned} 180^\circ - 130^\circ &= 50^\circ \\ 180^\circ - 50^\circ - 90^\circ &= 40^\circ \\ 40^\circ + 45^\circ &= 85^\circ \end{aligned}$$

26. 6z

$$\begin{aligned} 2 \text{ erasers} &\rightarrow \$z \\ 6 \text{ erasers} &\rightarrow \$3z \\ 4 \text{ pens} &\rightarrow \$2z \\ 2 \text{ pens} &\rightarrow \$z \\ 6 \text{ pens} &\rightarrow \$3z \\ \$3z + \$3z &= \$6z \end{aligned}$$

27. 1257.90

$$42 \times \$29.95 = \$1257.90$$

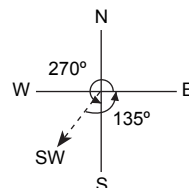
28. 104

$$\begin{array}{ccc} \text{Samantha} & : & \text{Amanda} & : & \text{Nicole} \\ 3 & : & 4 & : & 7 \\ & & & & \underbrace{\hspace{2cm}} \\ & & & & 11 \\ 3 & : & & & \\ 7 \text{ units} & = & 91 & & \\ 1 \text{ unit} & = & 91 \div 7 = 13 & & \\ 11 - 3 & = & 8 \text{ units} & & \\ 8 \text{ units} & = & 8 \times 13 = 104 & & \end{array}$$

29. 90 000

$$\begin{aligned} \frac{5}{6} - \frac{2}{3} &= \frac{5}{6} - \frac{4}{6} \\ &= \frac{1}{6} \\ 1 \text{ unit} &= 15\,000 \text{ cm}^3 \\ 6 \text{ units} &= 15\,000 \times 6 = 90\,000 \text{ cm}^3 \end{aligned}$$

30. south



Paper 2

1. **80**

$$45 \text{ min} = \frac{3}{4} \text{ h}$$

$$\begin{aligned} \text{Average speed} &= 60 \text{ km} \div \frac{3}{4} \text{ h} \\ &= 80 \text{ km/h} \end{aligned}$$

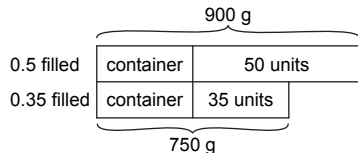
2. **145**

$$180^\circ - 70^\circ = 110^\circ$$

$$\text{BCA} = 110^\circ \div 2 = 55^\circ$$

$$\text{BCD} = 55^\circ + 90^\circ = 145^\circ$$

3. **880**



$$50 - 35 = 15 \text{ units}$$

$$900 \text{ g} - 750 \text{ g} = 150 \text{ g}$$

$$15 \text{ units} = 150 \text{ g}$$

$$1 \text{ unit} = 10 \text{ g}$$

$$48 \text{ units} = 10 \text{ g} \times 48 = 480 \text{ g}$$

$$50 \text{ units} = 10 \text{ g} \times 50 = 500 \text{ g}$$

$$900 \text{ g} - 500 \text{ g} = 400 \text{ g (empty container)}$$

$$400 \text{ g} + 480 \text{ g} = 880 \text{ g}$$

4. **625**

$$3.5 \text{ m} = 350 \text{ cm}$$

$$350 \text{ cm} \div 14 \text{ cm} = 25 \text{ tiles}$$

$$25 \times 25 = 625 \text{ tiles}$$

5. **66**

$$\text{big circle} \rightarrow \frac{22}{7} \times 14 = 44 \text{ cm}$$

$$\text{small circle} \rightarrow \frac{22}{7} \times 7 = 22 \text{ cm}$$

$$44 + 22 = 66 \text{ cm}$$

6. (a) **3 : 8**

$$36 : 96$$

$$3 : 8$$

The ratio is 3 : 8.

(b) **19 : 52**

$$36 + 76 + 96 = 208$$

$$76 : 208$$

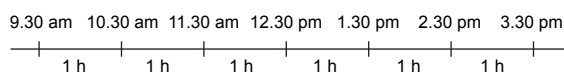
$$38 : 104$$

$$19 : 52$$

The ratio is 19 : 52.

7. **3.30 pm**

$$720 \text{ km} \div 120 \text{ km/h} = 6 \text{ h}$$



She would reach her hometown at 3.30 pm.

8. **45°**

$$135^\circ - 90^\circ = 45^\circ$$

$$180^\circ - 45^\circ - 90^\circ = 45^\circ$$

$$180^\circ - 45^\circ - 90^\circ = 45^\circ$$

$$\angle x \text{ is } 45^\circ.$$

9. **10 am**

$$\text{blue car} \rightarrow 80 \text{ km} \div 1 \text{ h} = 80 \text{ km/h}$$

$$\text{A to B} \rightarrow 80 \text{ km/h} \times (4 - 1) \text{ h} = 240 \text{ km}$$

$$\text{black car} \rightarrow 240 \text{ km} \div 60 \text{ km/h} = 4 \text{ h}$$

$$4 \text{ hours before } 2 \text{ pm} \rightarrow 10 \text{ am}$$

The black car left Checkpoint A at 10 am.

10. (a) **27 mangoes**

mangoes : watermelons

$$\text{Before } 3 : 7$$

$$\text{After } 3 : 5$$

$$7 - 5 = 2 \text{ units}$$

$$2 \text{ units} = 18$$

$$1 \text{ unit} = 18 \div 2 = 9$$

$$3 \text{ units} = 9 \times 3 = 27$$

There were 27 mangoes.

(b) **72 fruit**

$$3 + 5 = 8 \text{ units}$$

$$8 \text{ units} = 9 \times 8 = 72$$

72 fruit were not sold.

11. **25 cm**

$$120 \times 90 \times 70 = 756\,000 \text{ cm}^3$$

$$1 \text{ min} \rightarrow 18\,000 \text{ cm}^3$$

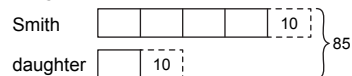
$$15 \text{ min} \rightarrow 270\,000 \text{ cm}^3$$

$$\text{Base area} = 120 \times 90 = 10\,800 \text{ cm}^2$$

$$\text{Height} = 270\,000 \div 10\,800 = 25 \text{ cm}$$

The height of the water is 25 cm.

12. **16 years old**



$$85 - 10 - 10 = 65$$

$$5 \text{ units} = 65$$

$$1 \text{ unit} = 65 \div 5 = 13$$

$$13 + 3 = 16 \text{ years old}$$

Her daughter will be 16 years old in 3 years' time.

13. (a) **$\frac{3}{20}$**

$$\text{comedy} \rightarrow 25\%$$

$$100\% - 30\% - 30\% - 25\% = 15\%$$

$$\frac{15}{100} = \frac{3}{20}$$

$\frac{3}{20}$ of the moviegoers watched science fiction movies.

(b) **270 moviegoers**

$$\frac{30}{100} \times 900 = 270$$

270 moviegoers watched thriller movies.

14. **8.20 am**

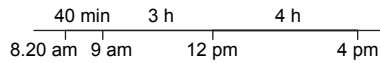
$$\text{Time taken} = 175 \text{ km} \div 75 \text{ km/h}$$

$$= 2\frac{1}{3} \text{ h}$$

$$= 2 \text{ h } 20 \text{ min}$$

$$\text{Total time} = 2 \text{ h } 20 \text{ min} + 2 \text{ h} + 3 \text{ h } 20 \text{ min}$$

$$= 7 \text{ h } 40 \text{ min}$$



He left his house at 8.20 am.

15. 121 yellow beads

1 bracelet \rightarrow 33 beads
 9 bracelets $\rightarrow 33 \times 9 = 297$ beads
 $7 + 11 + 9 = 27$ units
 27 units = 297 beads
 1 unit = 11 beads
 yellow $\rightarrow 11 \times 11 = 121$ beads
 She has 121 yellow beads.

16. \$396

$\times 2$ $\left\{ \begin{array}{l} 2 \text{ skirts} + 3 \text{ blouses} \rightarrow \$166 \\ 4 \text{ skirts} + 6 \text{ blouses} \rightarrow \$166 \times 2 = \$332 \\ 4 \text{ skirts} + 1 \text{ blouse} \rightarrow \$142 \\ 5 \text{ blouses} \rightarrow \$332 - \$142 = \$190 \\ 1 \text{ blouse} \rightarrow \$190 \div 5 = \$38 \\ 7 \text{ blouses} \rightarrow \$38 \times 7 = \$266 \end{array} \right.$

$\times 3$ $\left\{ \begin{array}{l} 4 \text{ skirts} + 1 \text{ blouse} \rightarrow \$142 \\ 12 \text{ skirts} + 3 \text{ blouses} \rightarrow \$142 \times 3 = \$426 \\ 10 \text{ skirts} \rightarrow \$426 - \$166 = \$260 \\ 1 \text{ skirt} \rightarrow \$26 \\ 5 \text{ skirts} \rightarrow \$26 \times 5 = \$130 \\ 5 \text{ skirts} + 7 \text{ blouses} \rightarrow \$130 + \$266 = \$396 \end{array} \right.$

The total cost was \$396.

17. (a) 465 children

$100\% - 75\% = 25\%$

$$\frac{25}{100} \times \frac{93}{1860} = 465$$

There were 465 children at first.

(b) 794 attendees

$$\text{parents} \rightarrow \frac{75}{100} \times 1860 = 1395$$

$$\frac{40}{100} \times 1395 = 558 \text{ parents}$$

$$\text{children} \rightarrow 465 - 229 = 236$$

$$558 + 236 = 794$$

794 attendees left the talk.

18. (a) 56 000 cm²

$$240 \times 200 = 48\,000 \text{ cm}^2$$

$$100 \times 80 = 8000 \text{ cm}^2$$

$$48\,000 + 8000 = 56\,000 \text{ cm}^2$$

The area of carpet needed is 56 000 cm²

(b) \$2576

$$100 \text{ cm}^2 \rightarrow \$4.60$$

$$56\,000 \text{ cm}^2 \rightarrow \$4.60 \times 560 = \$2576$$

He must pay \$2576.